

Amendments to the Claims

Please amend Claims 5, 6, 14, 15, 16, 17, 20, 21, 22, 25 and 27. Please add new Claims 28-39. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing:

1. (original) An HIV DNA vaccine composition comprising
a nucleic acid expression vector comprising at least one HIV Gag- or Env-
encoding sequence; and
PLG.
2. (original) The vaccine composition of claim 1, wherein the concentration of
PLG is between about 5 and 100 fold greater than the concentration of the nucleic
acid expression vector.
3. (original) The vaccine composition of claim 2, wherein the concentration of
nucleic acid is between about 10 µg/mL and 5 mg/mL and the concentration of the
PLG is between about 100 µg/mL and 100 mg/mL.
4. (original) The vaccine composition of claim 1, wherein the nucleic acid
concentration per dose is between approximately 1 µg/dose and 5 mg/dose and the
PLG concentration per dose is between approximately 10 µg/dose and 100 mg/dose.
5. (currently amended) The vaccine composition of ~~any one of claims 1 to 4~~
claim 1, as set forth in Table 1 or Table 2.
6. (currently amended) The vaccine composition of ~~any one of claims 1 to 4~~
claim 1, as set forth in column 2 of Table 9.
7. (original) An HIV vaccine composition comprising
oligomeric gp140 (o-gp140); and
a pharmaceutically acceptable excipient.
8. (original) The HIV vaccine of claim 7, wherein the concentration of o-gp140
is between about .1 and 10 mg/mL.

-4-

9. (original) The HIV vaccine of claim 7, wherein the concentration of o-gp140 per dose is approximately 100 µg/dose.
10. (original) The HIV vaccine of claim 7, as set forth in Table 3 or Table 11.
11. (original) The HIV vaccine of claim 7, further comprising an adjuvant.
12. (original) The HIV vaccine of claim 11, wherein the adjuvant is MF59 or CpG.
13. (original) The HIV vaccine of claim 12, wherein the adjuvant is MF59 and MF59 is as set forth in Table 4.
14. (currently amended) An HIV vaccine comprising an HIV Env DNA vaccine composition, said HIV Env DNA vaccine composition comprising at least one HIV Env-encoding sequence and PLG according to any one of claims 1 to 6; an HIV Gag DNA vaccine composition, said HIV Gag DNA vaccine composition comprising at least one HIV Gag-encoding sequence and PLG according to any one of claims 1 to 6; and an HIV vaccine composition, said HIV vaccine composition comprising oligomeric gp140 (o-gp140) and a pharmaceutically acceptable excipient according to any one of claims 7 to 13.
15. (currently amended) A method of generating an immune response in a subject, said method comprising:
 - (a) administering to the subject at least one HIV vaccine composition, said composition according to any of claims 1 to 14 to the subject comprising: (i) a nucleic acid expression vector comprising at least one HIV Gag- or Env-encoding sequence or (ii) an HIV oligomeric gp 140; and
 - (b) administering to the subject, at a time subsequent to the administering of step (a), at least one HIV vaccine composition, said composition according to any of claims 1 to 14 comprising: (i) a nucleic acid expression vector comprising at least one HIV Gag- or Env-encoding sequence or (ii) an HIV oligomeric gp 140.
16. (currently amended) ~~The method of claim 15, wherein step (a) comprises~~ A method of generating an immune response in a subject, said method comprising: (a) administering to said subject at least one HIV DNA vaccine composition comprising a

nucleic acid expression vector comprising at least one HIV Gag- or Env-encoding sequence; according to any of claims 1-6 and step (b) comprises and (b) administering to the subject, at a time subsequent to the administering of step (a), at least one vaccine composition according to any of claims 7-13 comprising HIV oligomeric gp140.

17. (currently amended) The method of claim 16, wherein step (a) comprises multiple administrations of said at least one HIV DNA vaccine composition ~~according to claims 1-6~~ and step (b) comprises multiple administrations of said at least one vaccine composition comprising HIV oligomeric gp 140 ~~according to any of claims 7-13.~~

18. (original) The method of claim 17, wherein step (a) comprises two or three administrations at one month intervals; step (b) comprises two or three administrations at 1, 2 or 3 month intervals; and the time between the administrations of step (a) and step (b) is 1 to 5 months.

19. (currently amended) The method of ~~any of claims 15 to 18~~ claim 16, wherein step (a) comprises administering at least one HIV Gag DNA vaccine and at least one HIV Env DNA vaccine.

20. (currently amended) The method of claim 15 ~~or claim 18~~, wherein step (b) comprises concurrently administering at least one DNA vaccine ~~according to any of claims 1-6~~ comprising a nucleic acid expression vector comprising at least one HIV Gag- or Env-encoding sequence and at least one HIV vaccine ~~according to any of claims 7-13~~ comprising oligomeric gp 140.

21. (currently amended) The method of ~~any of~~ claim 20, wherein step (a) comprises administering at least one HIV Gag DNA vaccine and at least one HIV Env DNA vaccine.

22. (currently amended) The method of ~~any of claims 15-21~~ claim 15, wherein at least one administration is intramuscular or intradermal.

23. (original) A method of making oligomeric HIV Env gp140 proteins, comprising the steps of
introducing a nucleic acid encoding gp140 into a host cell;

-6-

culturing the host cell under conditions such that gp140 is expressed in the cell; and

isolating oligomeric gp140 (o-gp140) protein from the host cell.

24. (original) The method of claim 23, wherein the o-gp140 is secreted from the cell and isolated from the cell supernatant.

25. (currently amended) A method of making an HIV DNA vaccine according to ~~any of claims 1-6~~ claim 1, comprising the step of

combining a nucleic acid expression vector comprising a sequence encoding one or more HIV polypeptides with aseptic PLG microparticles such that the nucleic acid binds to the PLG microparticles to form a DNA/PLG HIV vaccine.

26. (original) The method of claim 25, further comprising the step of lyophilizing the DNA/PLG HIV vaccines.

27. (currently amended) A method of making an HIV vaccine according to ~~any of claims 7-13~~ claim 7, comprising combining o-gp140 with an adjuvant.

28. (new) The HIV vaccine of claim 14, wherein the concentration of PLG is between about 5 and 100 fold greater than the concentration of the nucleic acid expression vector.

29. (new) The HIV vaccine of claim 28, wherein the concentration of nucleic acid is between about 10 µg/mL and 5 mg/mL and the concentration of the PLG is between about 100 µg/mL and 100 mg/mL.

30. (new) The HIV vaccine of claim 14, wherein the concentration of nucleic acid per dose is between approximately 1 µg/dose and 5 mg/dose and the concentration of the PLG per dose is between about 10 µg/dose and 100 mg/dose.

31. (new) The HIV vaccine of claim 14, wherein the HIV Env DNA vaccine composition component is as set forth in Table 1 or column 2 of Table 9.

32. (new) The HIV vaccine of claim 14, wherein the HIV Gag DNA vaccine composition component is as set forth in Table 2 or column 2 of Table 9.

-7-

33. (new) The HIV vaccine of claim 14, wherein the concentration of o-gp140 is between about 0.1 and 10 mg/mL.
34. (new) The HIV vaccine of claim 14, wherein the concentration of o-gp140 per dose is approximately 100 µg/dose.
35. (new) The HIV vaccine of claim 14, wherein the HIV vaccine composition component is as set forth in Table 3 or Table 11.
36. (new) The HIV vaccine of claim 14, wherein the HIV vaccine composition component further comprising an adjuvant.
37. (new) The HIV vaccine of claim 36, wherein the adjuvant is MF59 or CpG.
38. (new) The HIV vaccine of claim 37, wherein the adjuvant is MF59 and MF59 is as set forth in Table 4.
39. (new) The method of claim 16, wherein at least one administration is intramuscular or intradermal.